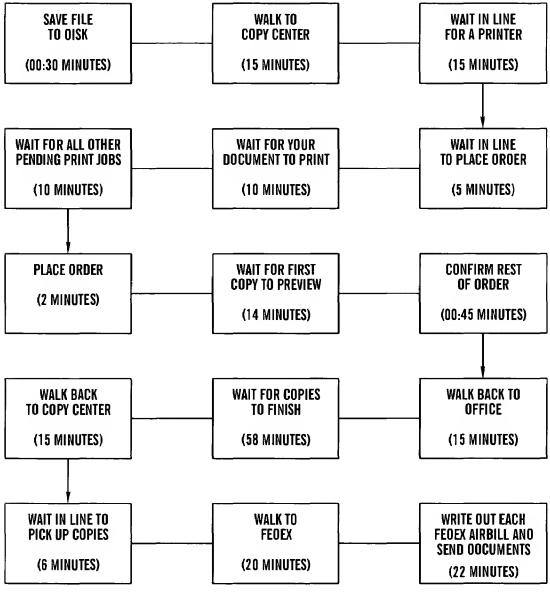


FIG. 1
PRIOR ART

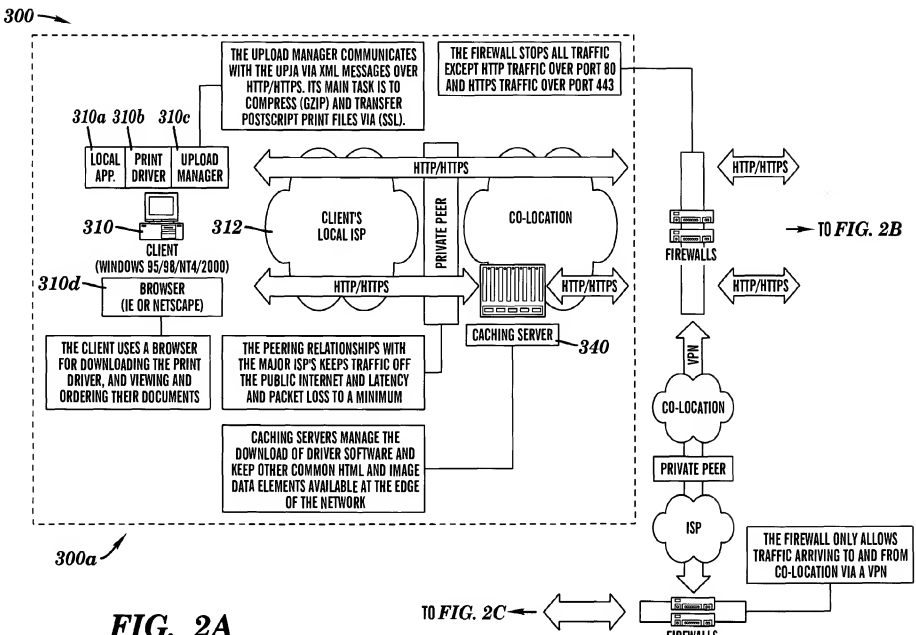


FIG. 2A

Replacement Sheet
2/58

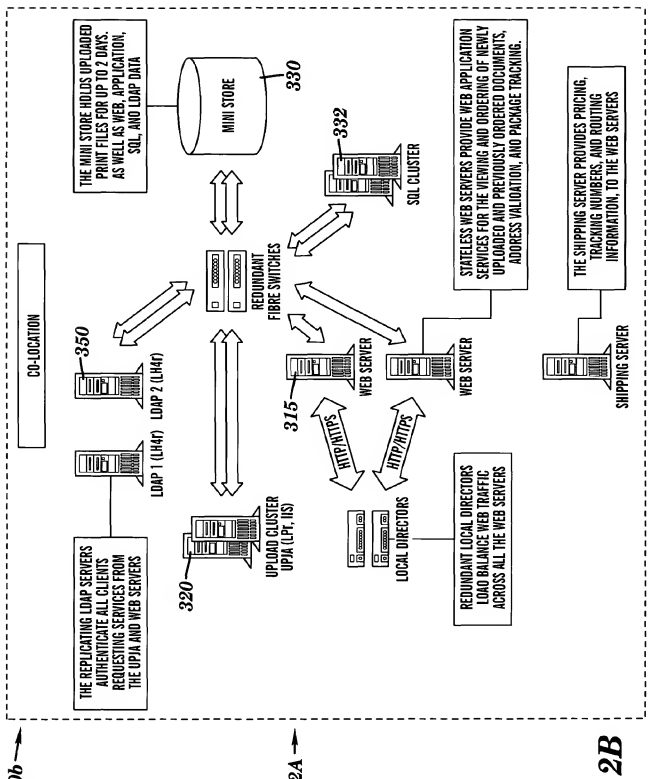

300b
FROM FIG. 2A
CO-LOCATION
THE REPLICATING LOAP SERVERS AUTHENTICATE ALL CLIENTS REQUESTING SERVICES FROM THE UPJA AND WEB SERVERS
LOAP 1 (LH4f)
LOAP 2 (LH4f)
350
THE MINI STORE HOLDS UPLOADED PRINT FILES FOR UP TO 2 DAYS, AS WELL AS WEB APPLICATION, SQL, AND LOAP DATA
MINI STORE
330
REDUNDANT FIBRE SWITCHES
332
SQL CLUSTER
320
UPLOAD CLUSTER UPJA (LPr, IIS)
315
WEB SERVER
WEB SERVER
HTTP/HTTPS
HTTP/HTTPS
LOCAL DIRECTORS
REDUNDANT LOCAL DIRECTORS LOAD BALANCE WEB TRAFFIC ACROSS ALL THE WEB SERVERS
STATELESS WEB SERVERS PROVIDE WEB APPLICATION SERVICES FOR THE VIEWING AND ORDERING OF NEWLY UPLOADED AND PREVIOUSLY ORDERED DOCUMENTS, ADDRESS VALIDATION, AND PACKAGE TRACKING.
THE SHIPPING SERVER PROVIDES PRICING, TRACKING NUMBERS, AND ROUTING INFORMATION, TO THE WEB SERVERS
SHIPPING SERVER

FIG. 2B

300c
FROM FIG. 2A
MEMPHIS
MAIN STORE
THE MAIN STORE IS A FIBRE ACCESSED CENTRALIZED DISK STORAGE UNIT
REDUNDANT FIBRE SWITCHES
STORAGE CLUSTER (LH47)
THE STORAGE CLUSTER CONTROLS ACCESS TO ALL PRINT FILES
QUEUE 1
QUEUE 2
REDUNDANT QUEUES MANAGE THE PRINT JOBS TO BE PRINTED

FIG. 2C

300a
DEVMODE DATA STORE
1.03:READ/WRITE DATA()
DATA STORE FILTER
PRINT DRIVER UI
310b
1.02:READ/WRITE DATA()
1.04:GDI.COLLECTUSERPREFS()
1.01:ALLOC DATA STORE()
APPLICATION
GDI INTERFACE
GDI
PRINT DRIVER FILTER
DDI INTERFACE
PRINT DRIVER PDL GEN
310a
1.05*(WHILE MORE TO PRINT: GDI.GRAPHICSCMD()
1.06*(WHILE MORE TO PRINT: DDI.GRAPHICS
1.07*(WHILE MORE TO PRINT: SPOOL_PSCMDS())
1.0:USER PRINT REQUEST
USER SELECTS PRINT
PRINT SPOOLER
344
PORT FILTER
1.08*(WHILE MORE TO PRINT: PRINT FILE=PM.SPOOLPRINTDATA()
348
VERSION MANAGER
1.09: VERIFY DRIVER()
PORT MONITOR
346
0.2:VERIFY EC COMPONENTS()
2.1:DISPLAY ABOUT BOX()
1.10 (VALID DRIVER USED): PASS PS FILE TO UPLOAD_MANAGER()
UPLOAD MANAGER
1.11 (NO PREV INSTANCE OF UPLOAD_MANAGER RUNNING: PASS PS FILE TO UPJA()
310c
0.1:VERIFY DEFAULT PRINT DRIVER()
SYSTEM TRAY APPLICATION
UPJA
320
0.0: POWER UP
2.0: USER SELECT ABOUT EC
1.12:GENERATE.ASP PAGE
POWER UP
USER SELECTS ABOUT
SQL SERVER
332

FIG. 3

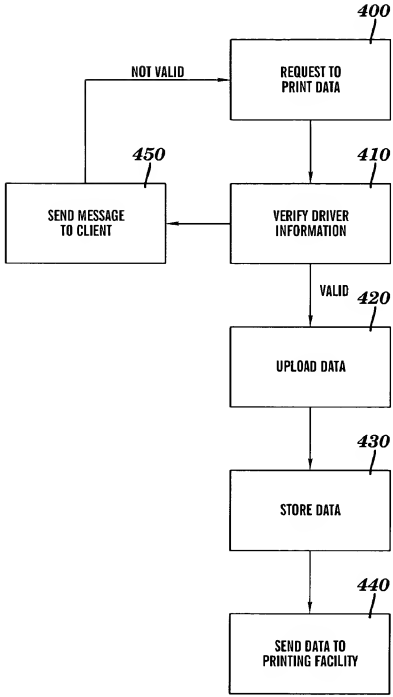

400
REQUEST TO PRINT DATA
NOT VALID
450
SEND MESSAGE TO CLIENT
410
VERIFY DRIVER INFORMATION
VALID
420
UPLOAD DATA
430
STORE DATA
440
SEND DATA TO PRINTING FACILITY

FIG. 4

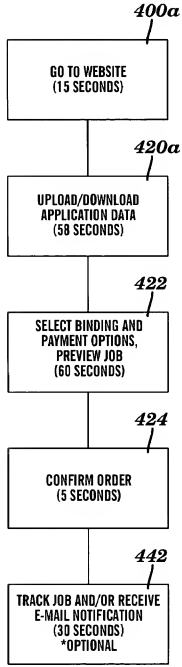

400a
GO TO WEBSITE
(15 SECONDS)
420a
UPLOAD/DOWNLOAD
APPLICATION DATA
(50 SECONDS)
422
SELECT BINDING AND
PAYMENT OPTIONS,
PREVIEW JOB
(60 SECONDS)
424
CONFIRM ORDER
(5 SECONDS)
442
TRACK JOB AND/OR RECEIVE
E-MAIL NOTIFICATION
(30 SECONDS)
*OPTIONAL

FIG. 5

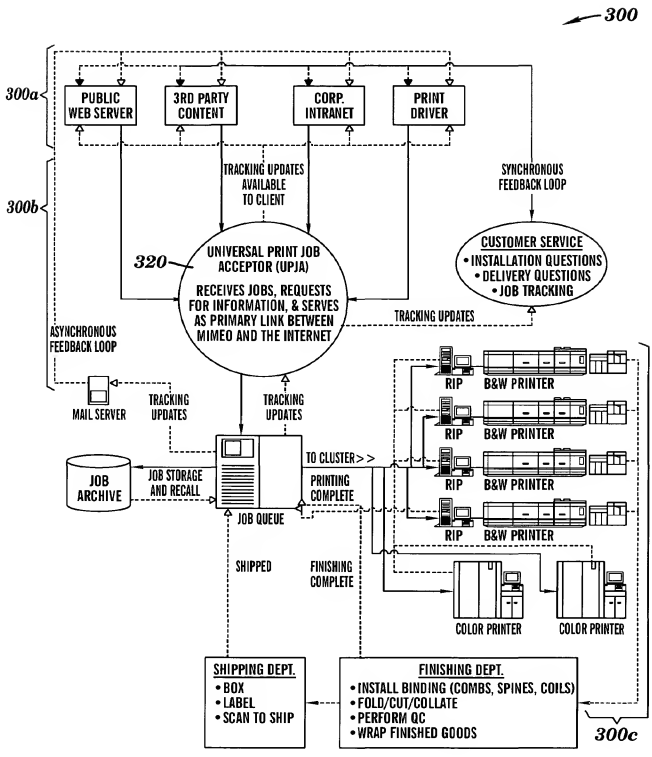

300
300a
300b
PUBLIC WEB SERVER
3RD PARTY CONTENT
CORP. INTRANET
PRINT DRIVER
TRACKING UPDATES AVAILABLE TO CLIENT
SYNCHRONOUS FEEDBACK LOOP
320
UNIVERSAL PRINT JOB ACCEPTOR (UPJA)
RECEIVES JOBS, REQUESTS FOR INFORMATION, & SERVES AS PRIMARY LINK BETWEEN MIMEO AND THE INTERNET
CUSTOMER SERVICE
• INSTALLATION QUESTIONS
• DELIVERY QUESTIONS
• JOB TRACKING
TRACKING UPDATES
ASYNCHRONOUS FEEDBACK LOOP
MAIL SERVER
TRACKING UPDATES
TRACKING UPDATES
JOB ARCHIVE
JOB STORAGE AND RECALL
JOB QUEUE
TO CLUSTER>>
PRINTING COMPLETE
RIP
B&W PRINTER
RIP
B&W PRINTER
RIP
B&W PRINTER
RIP
B&W PRINTER
SHIPPED
FINISHING COMPLETE
COLOR PRINTER
COLOR PRINTER
SHIPPING DEPT.
• BOX
• LABEL
• SCAN TO SHIP
FINISHING DEPT.
• INSTALL BINDING (COMBS, SPINES, COILS)
• FOLD/CUT/COLLATE
• PERFORM QC
• WRAP FINISHED GOODS
300c

FIG. 6

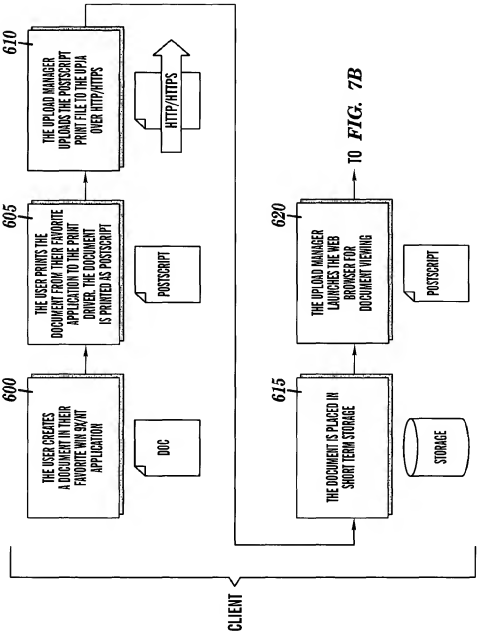

CLIENT
600
THE USER CREATES A DOCUMENT IN THEIR FAVORITE WIN 9X/NT APPLICATION
DOC
605
THE USER PRINTS THE DOCUMENT FROM THEIR FAVORITE APPLICATION TO THE PRINT DRIVER. THE DOCUMENT IS PRINTED AS POSTSCRIPT
POSTSCRIPT
610
THE UPLOAD MANAGER UPLOADS THE POSTSCRIPT PRINT FILE TO THE VPJA OVER HTTP/HTTPS
HTTP/HTTPS
615
THE DOCUMENT IS PLACED IN SHORT TERM STORAGE
STORAGE
620
THE UPLOAD MANAGER LAUNCHES THE WEB BROWSER FOR DOCUMENT VIEWING
POSTSCRIPT
TO FIG. 7B

FIG. 7A

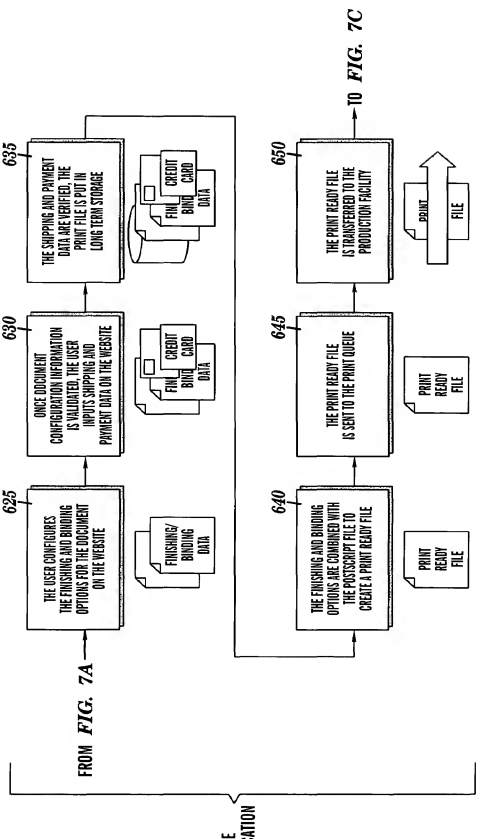

WEBSITE CO-LOCATION
FROM FIG. 7A
625
THE USER CONFIGURES THE FINISHING AND BINDING OPTIONS FOR THE DOCUMENT ON THE WEBSITE
FINISHING/ BINDING DATA
630
ONCE DOCUMENT CONFIGURATION INFORMATION IS VALIDATED, THE USER INPUTS SHIPPING AND PAYMENT DATA ON THE WEBSITE
FIN. BIND. DATA
CREDIT CARD DATA
635
THE SHIPPING AND PAYMENT DATA ARE VERIFIED, THE PRINT FILE IS PUT IN LONG TERM STORAGE
FIN. BIND. DATA
CREDIT CARD DATA
640
THE FINISHING AND BINDING OPTIONS ARE COMBINED WITH THE POSTSCRIPT FILE TO CREATE A PRINT READY FILE
PRINT READY FILE
645
THE PRINT READY FILE IS SENT TO THE PRINT QUEUE
PRINT READY FILE
650
THE PRINT READY FILE IS TRANSFERRED TO THE PRODUCTION FACILITY
PRINT
FILE
TO FIG. 7C

FIG. 7B

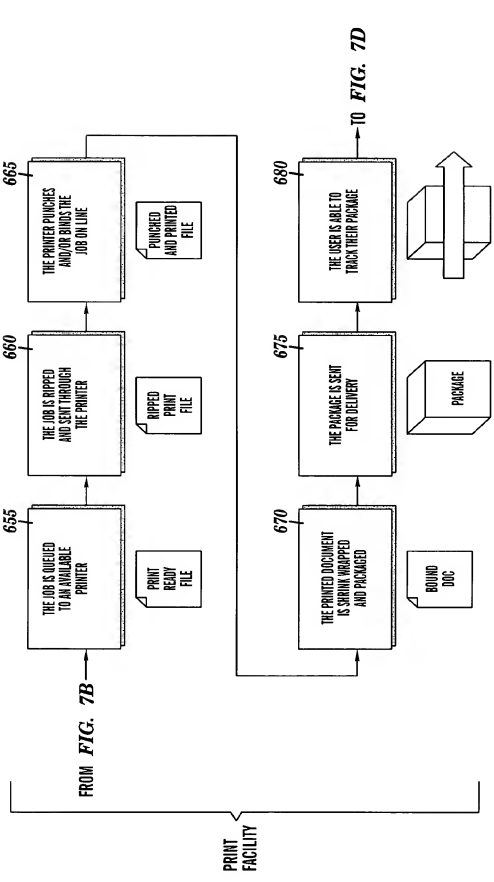

PRINT FACILITY
FROM FIG. 7B
655
THE JOB IS QUEUED TO AN AVAILABLE PRINTER
PRINT READY FILE
660
THE JOB IS RIPPED AND SENT THROUGH THE PRINTER
RIPPED PRINT FILE
665
THE PRINTER PUNCHES AND/OR BINDS THE JOB ON LINE
PUNCHED AND PRINTED FILE
670
THE PRINTED DOCUMENT IS SHRINK WRAPPED AND PACKAGED
BOUND DOC
675
THE PACKAGE IS SENT FOR DELIVERY
PACKAGE
680
THE USER IS ABLE TO TRACK THEIR PACKAGE
TO FIG. 7D

FIG. 7C

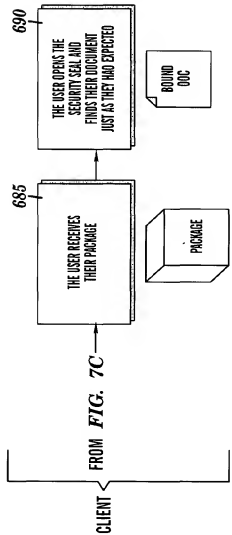

CLIENT
FROM FIG. 7C
685
THE USER RECEIVES THEIR PACKAGE
PACKAGE
690
THE USER OPENS THE SECURITY SEAL AND FINDS THEIR DOCUMENT JUST AS THEY HAD EXPECTED
BOUND DOC

FIG. 7D

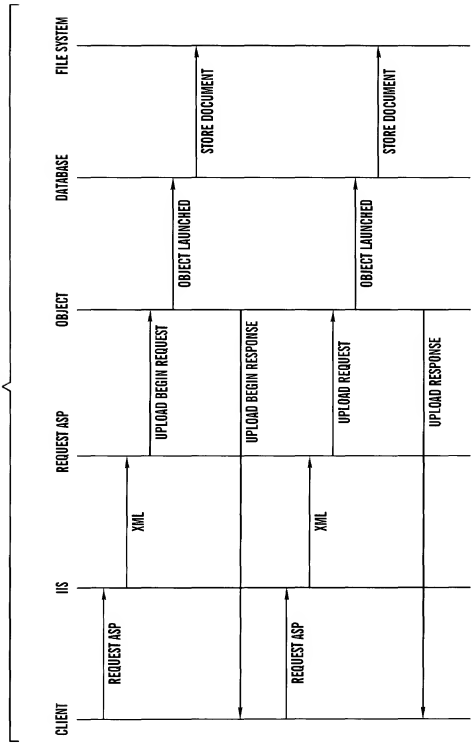

UPJA
CLIENT
IIS
REQUEST ASP
OBJECT
DATABASE
FILE SYSTEM
REQUEST ASP
XML
UPLOAD BEGIN REQUEST
OBJECT LAUNCHED
STORE DOCUMENT
UPLOAD BEGIN RESPONSE
REQUEST ASP
XML
UPLOAD REQUEST
OBJECT LAUNCHED
STORE DOCUMENT
UPLOAD RESPONSE

FIG. 8

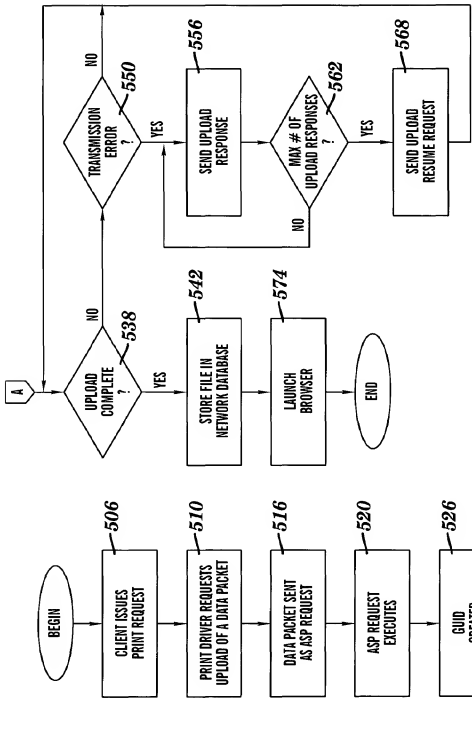

BEGIN
CLIENT ISSUES PRINT REQUEST
506
PRINT DRIVER REQUESTS UPLOAD OF A DATA PACKET
510
DATA PACKET SENT AS ASP REQUEST
516
ASP REQUEST EXECUTES
520
GUID CREATED
526
FILE UPLOADED
532
A
A
UPLOAD COMPLETE ?
538
NO
YES
STORE FILE IN NETWORK DATABASE
542
LAUNCH BROWSER
574
END
TRANSMISSION ERROR ?
550
NO
YES
SEND UPLOAD RESPONSE
556
MAX # OF UPLOAD RESPONSES ?
562
NO
YES
SEND UPLOAD RESUME REQUEST
568

FIG. 9

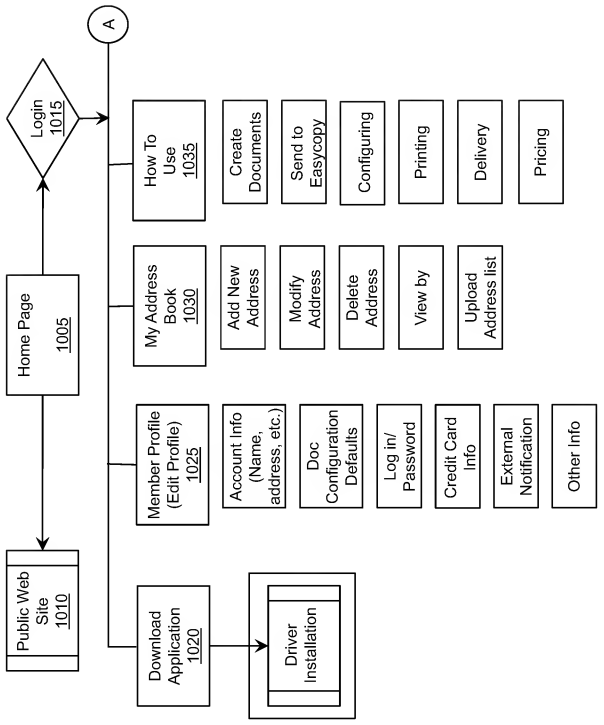

Public Web Site 1010
Home Page 1005
Login 1015
A
Download Application 1020
Driver Installation
Member Profile (Edit Profile) 1025
Account Info (Name, address, etc.)
Doc Configuration Defaults
Log in/ Password
Credit Card Info
External Notification
Other Info
My Address Book 1030
Add New Address
Modify Address
Delete Address
View by
Upload Address list
How To Use 1035
Create Documents
Send to Easycopy
Configuring
Printing
Delivery
Pricing

FIG. 10A

FIG. 10B

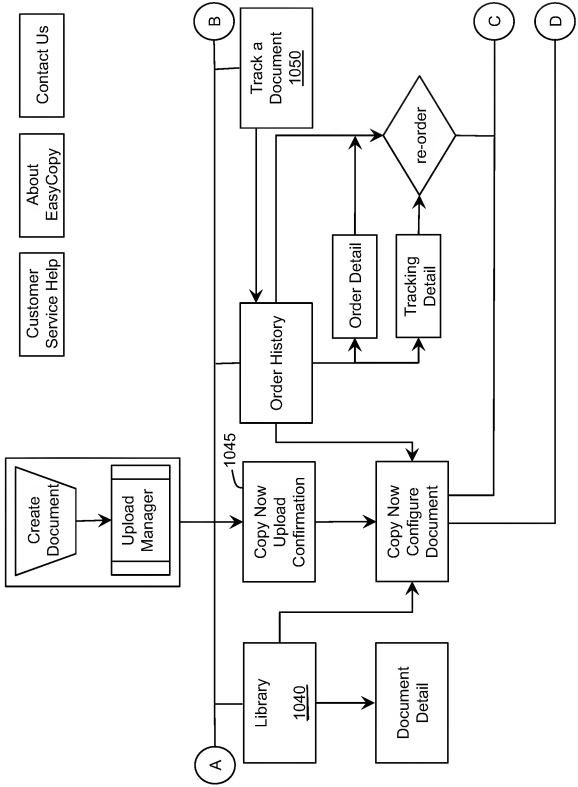

Contact Us
About EasyCopy
Customer Service Help
Create Document
Upload Manager
1045
Copy Now Upload Confirmation
Copy Now Configure Document
Order History
Track a Document 1050
Order Detail
Tracking Detail
re-order
Library 1040
Document Detail
A
B
C
D

FIG. 10C

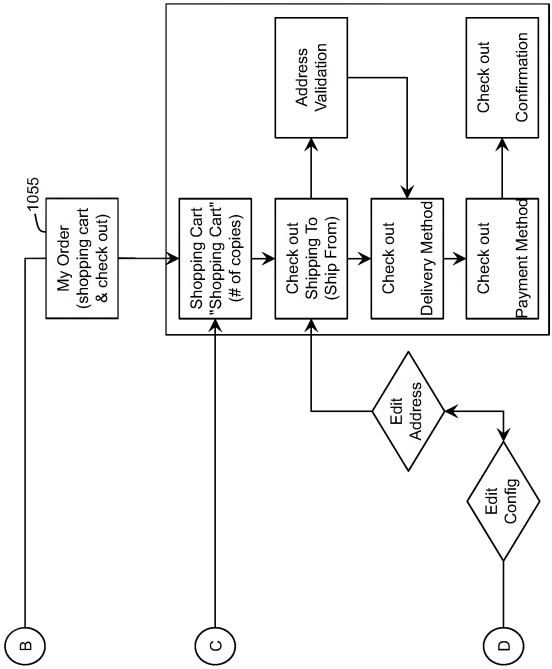

B
C
D
1055
My Order (shopping cart & check out)
Shopping Cart "Shopping Cart" (# of copies)
Check out Shipping To (Ship From)
Address Validation
Check out Delivery Method
Check out Payment Method
Check out Confirmation
Edit Address
Edit Config

FIG. 11

Home Page

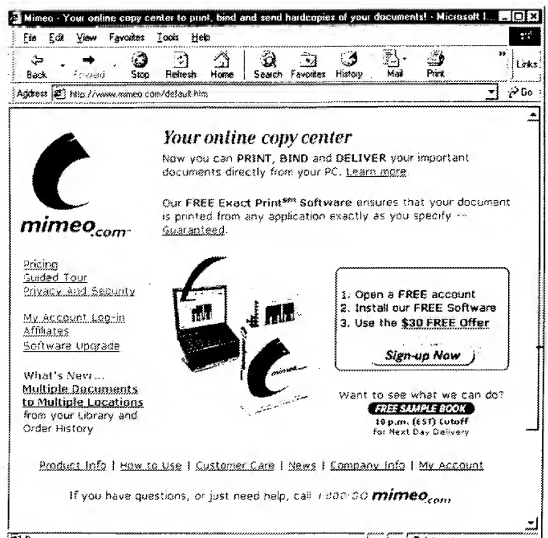


FIG. 12

Sign-up Screen

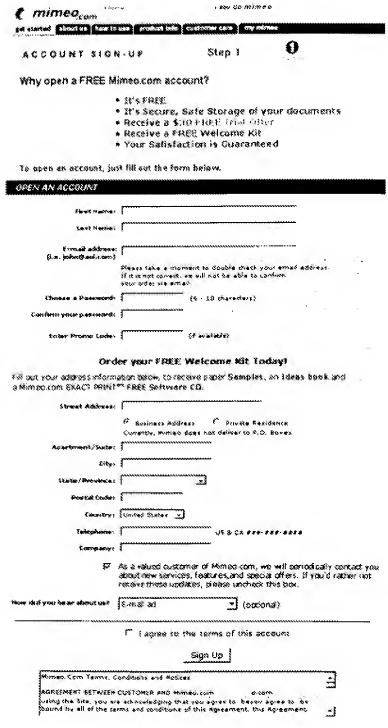


FIG. 13

Download Screen

Determines the users operating system and browser and gives appropriate software version and instructions.

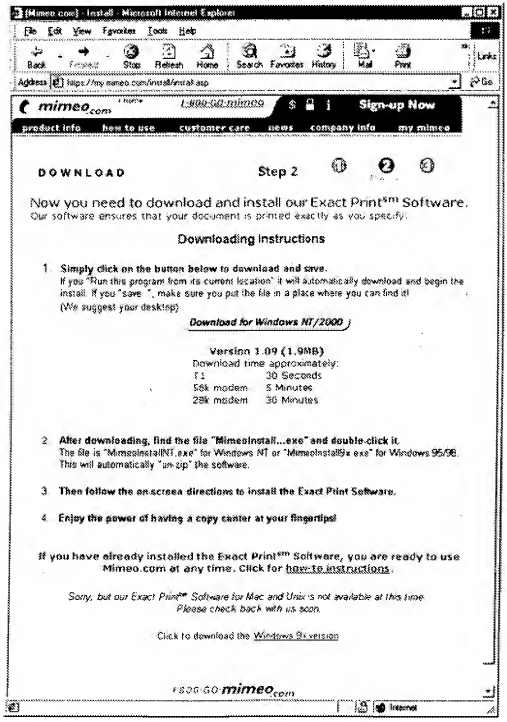


FIG. 14A

Install Screen

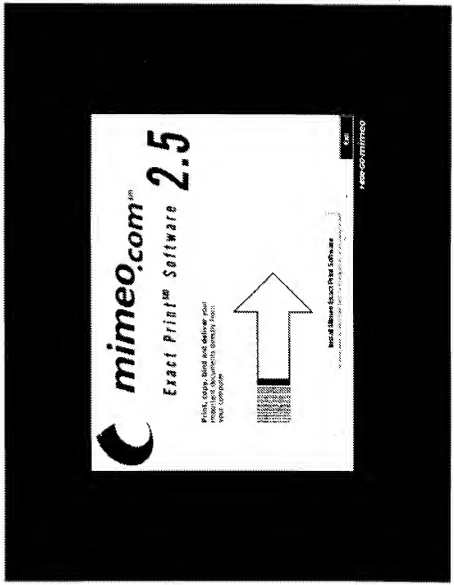


FIG. 14B

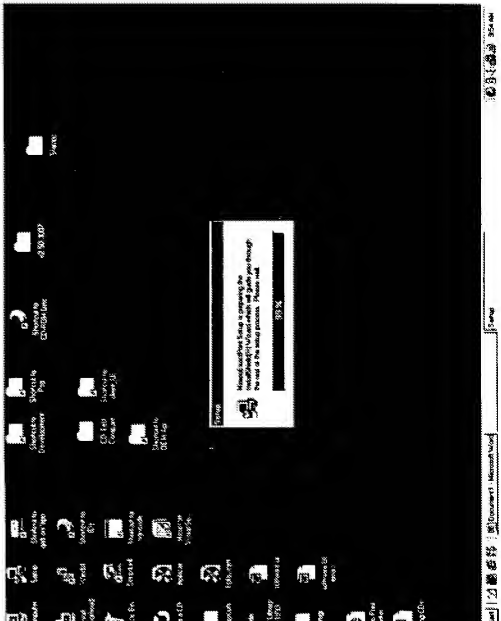


FIG. 14C

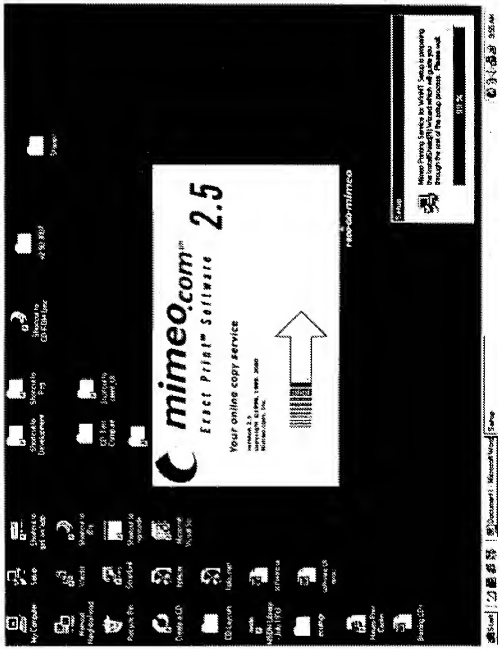

mimeo.com
Exact Print Software
2.5
Your online copy service
neverdo-mimeo

FIG. 14D

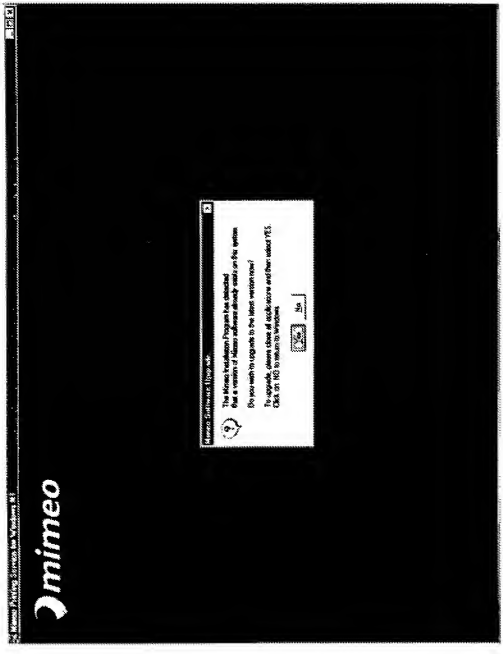

mimeo
Mimeo Existence Manager
The Mimeo Installation Program has detected
that a version of Mimeo software already exists on this system.
Do you wish to upgrade to the latest version now?
To upgrade, please close all applications and then select YES.
Click on NO to return to Windows.
Yes
No

FIG. 14E

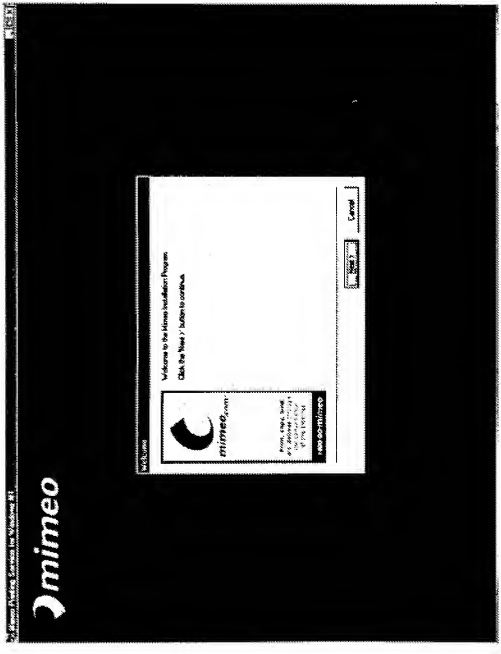

mimeo
Welcome
Welcome to the Mimeo Installation Program.
Click the 'Next >' button to continue.
mimeo.com
Next >
Cancel

FIG. 14F

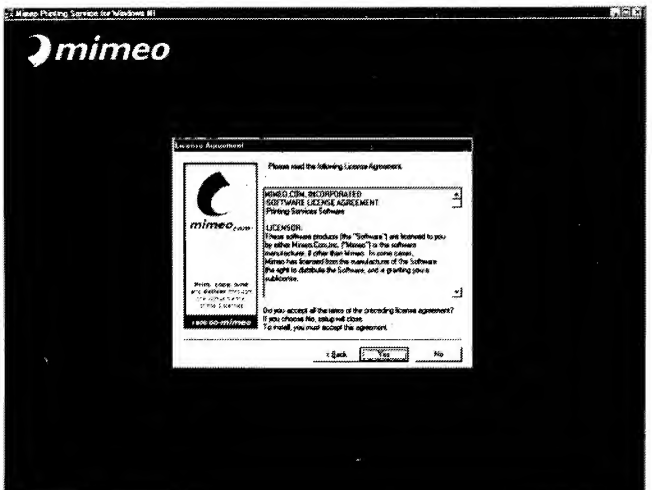

mimeo
License Agreement
Please read the following License Agreement.
MIMEO.COM, INCORPORATED
SOFTWARE LICENSE AGREEMENT
Printing Services Software
LICENSOR.
These software products (the "Software") are licensed to you
by either Mimeo.Com,Inc. ("Mimeo") or the software
manufacturer. If other than Mimeo. In some cases,
Mimeo has licensed from the manufacturer of the Software
the right to distribute the Software, and is granting you a
sublicense.
Do you accept all the terms of the preceding license agreement?
If you choose No, setup will close.
To install, you must accept this agreement.
< Back
Yes
No

FIG. 14G

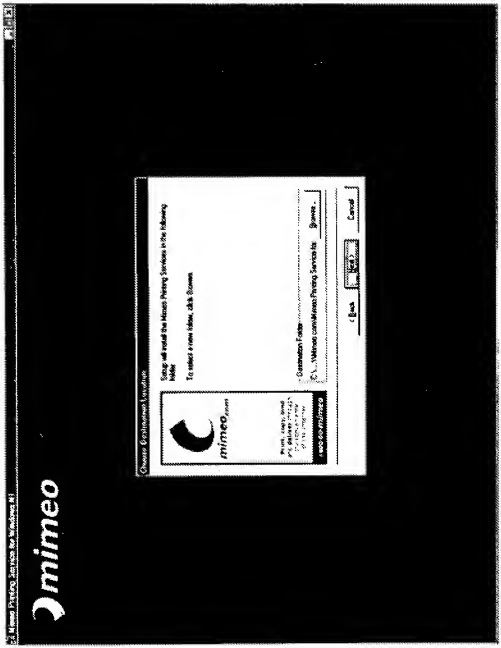

mimeo
Choose Destination Location
Setup will install the Mimeo Printing Services in the following folder.
To install to a new folder, click Browse.
mimeo.com
Destination Folder
C:\...\Mimeo.com\Mimeo Printing Services\
Browse...
< Back
Next >
Cancel

FIG. 14H

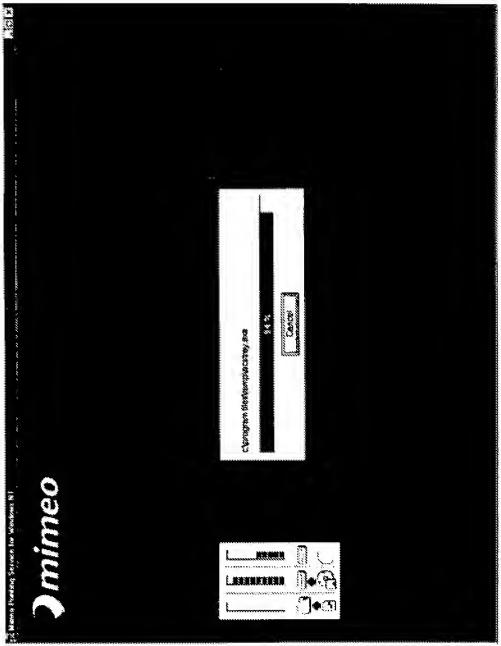


FIG. 141

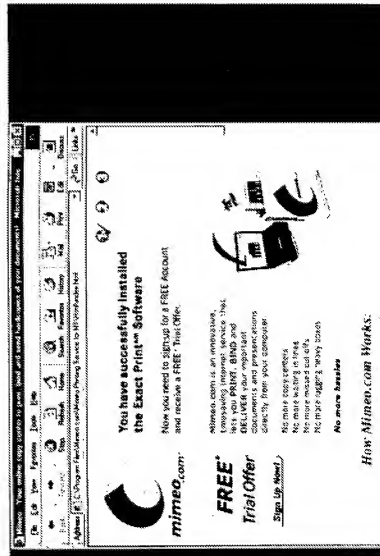

You have succesfully installed the Exact Print™ Software
Now you need to signup for a FREE Account and receive a FREE* Trial Offer.
mimeo.com
FREE* Trial Offer
Sign Up Now!
mimeo.com is an innovative, revolutionary software service that lets you PRINT, BIND and DELIVER your important documents and presentations directly from your computer.
No more copy centers
No more waiting in lines
No more wasted gas
No more jagged away costs
No more hassles
How Mimeo.com Works:
1 Print to Mimeo
In any application, open your document and select "Print" from the "File" pull down menu. Click "OK" to connect to the Mimeo.com site.

FIG. 15A

Print to Mimeo.com
Select print from the file menu

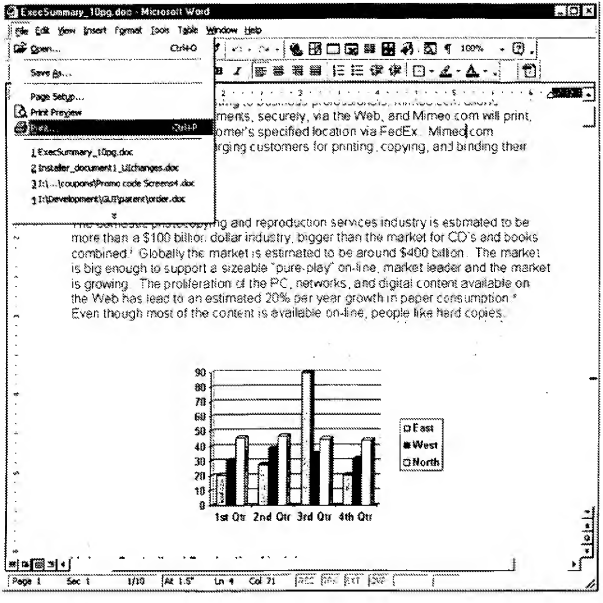


FIG. 15B

Print Dialogue Box

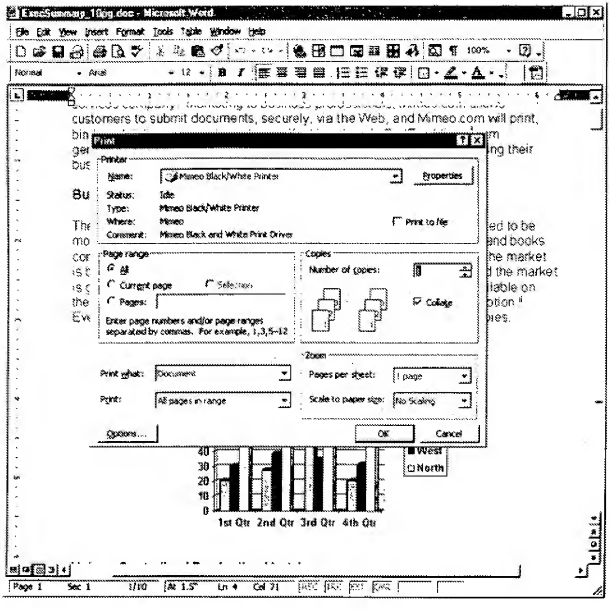


FIG. 15C

Print Dialogue Box

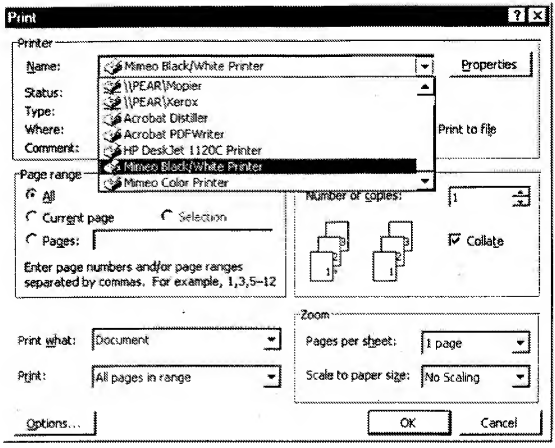


FIG. 15D

Reminder Screen

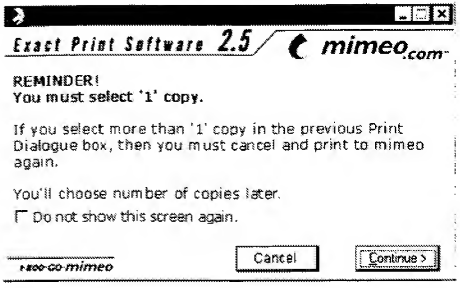


FIG. 15E

Name & Encrypt Document

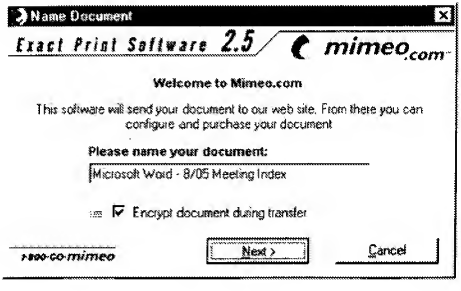


FIG. 15F

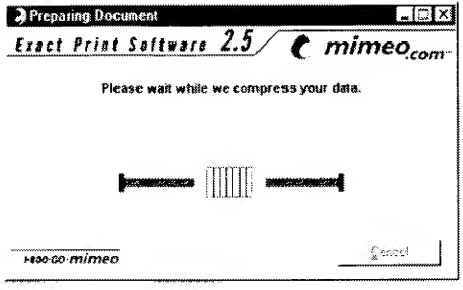


FIG. 15G

FIG. 15H

Transfer Document to Mimeo.com

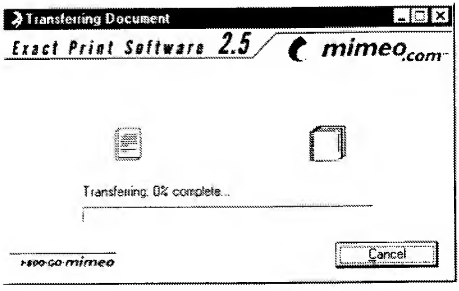


FIG. 15I

Transferring Document

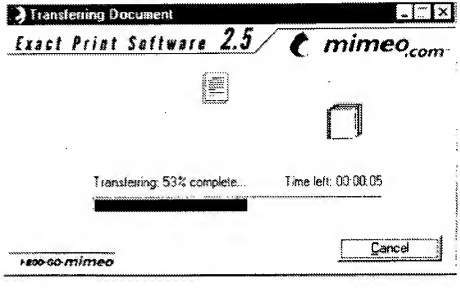


FIG. 15J

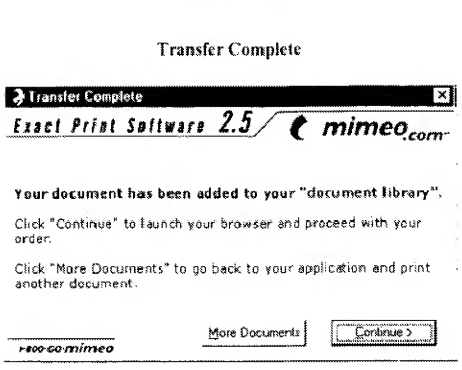

Transfer Complete
Transfer Complete
Exact Print Software 2.5
mimeo.com
Your document has been added to your "document library".
Click "Continue" to launch your browser and proceed with your order.
Click "More Documents" to go back to your application and print another document.
More Documents
Continue >
mimeo.com

FIG. 15K

Rendering Document for Preview

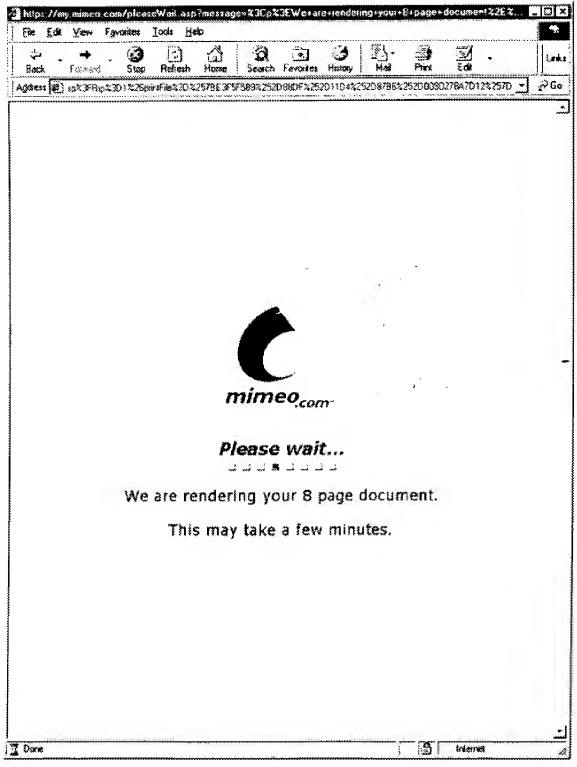


FIG. 16A

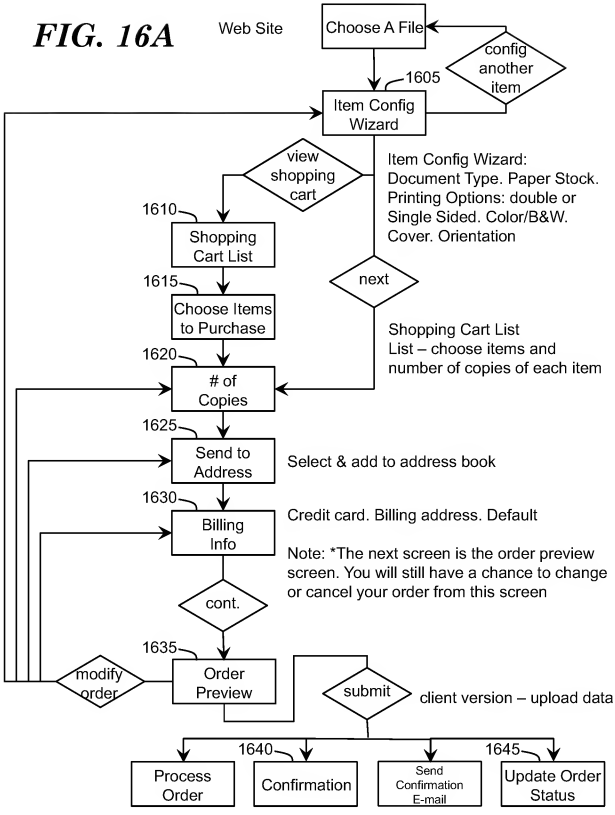

Web Site
Choose A File
config another item
1605
Item Config Wizard
view shopping cart
Item Config Wizard: Document Type. Paper Stock. Printing Options: double or Single Sided. Color/B&W. Cover. Orientation
1610
Shopping Cart List
1615
next
Choose Items to Purchase
Shopping Cart List List – choose items and number of copies of each item
1620
# of Copies
1625
Send to Address
Select & add to address book
1630
Billing Info
Credit card. Billing address. Default
Note: *The next screen is the order preview screen. You will still have a chance to change or cancel your order from this screen
cont.
1635
modify order
Order Preview
submit
client version – upload data
1640
1645
Process Order
Confirmation
Send Confirmation E-mail
Update Order Status

FIG. 16B

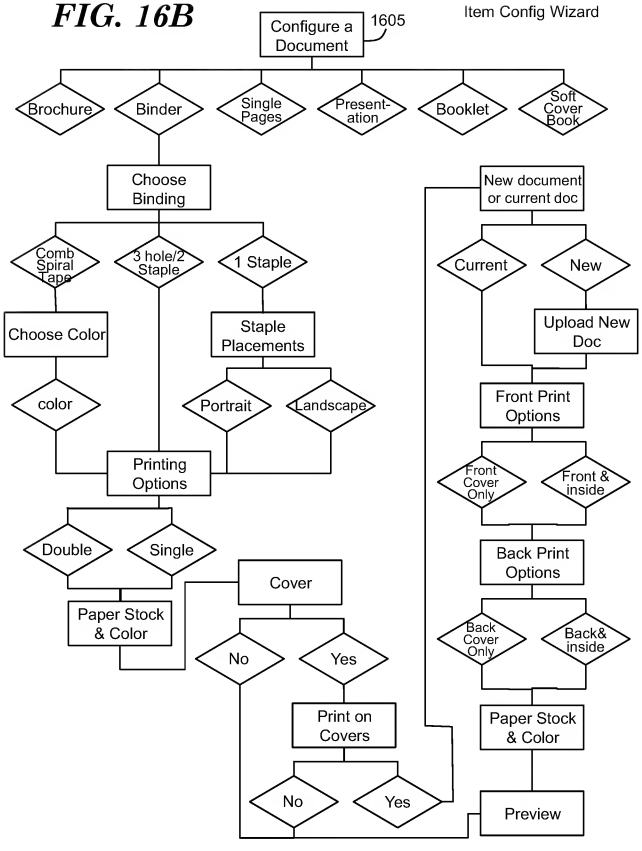

Item Config Wizard
Configure a Document
1605
Brochure
Binder
Single Pages
Present-ation
Booklet
Soft Cover Book
Choose Binding
Comb Spiral Tape
3 hole/2 Staple
1 Staple
Choose Color
color
Staple Placements
Portrait
Landscape
Printing Options
Double
Single
Paper Stock & Color
Cover
No
Yes
Print on Covers
No
Yes
New document or current doc
Current
New
Upload New Doc
Front Print Options
Front Cover Only
Front & inside
Back Print Options
Back Cover Only
Back& inside
Paper Stock & Color
Preview

FIG. 17A

Library

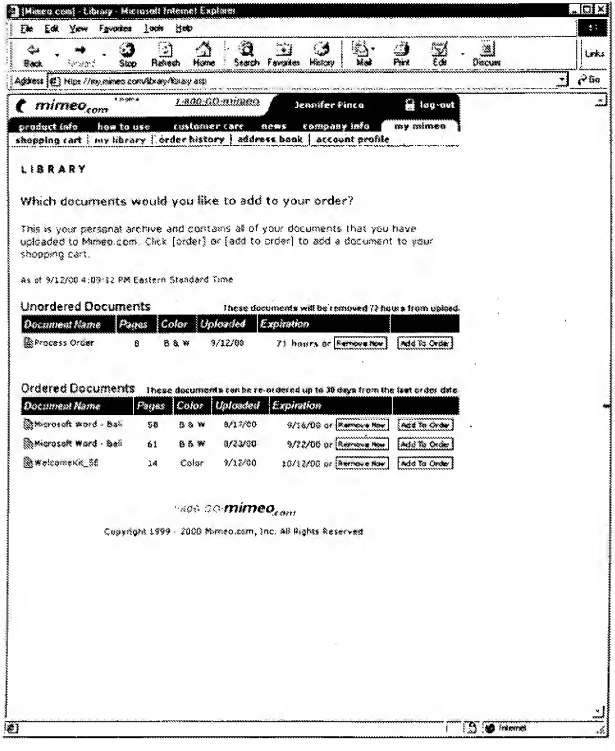


FIG. 17B

Ezviewer (Exact Print Configurator)

Users configure and preview the 'printed' document in real time. The price per copy is updated immediately and the user can navigate and preview the entire document.

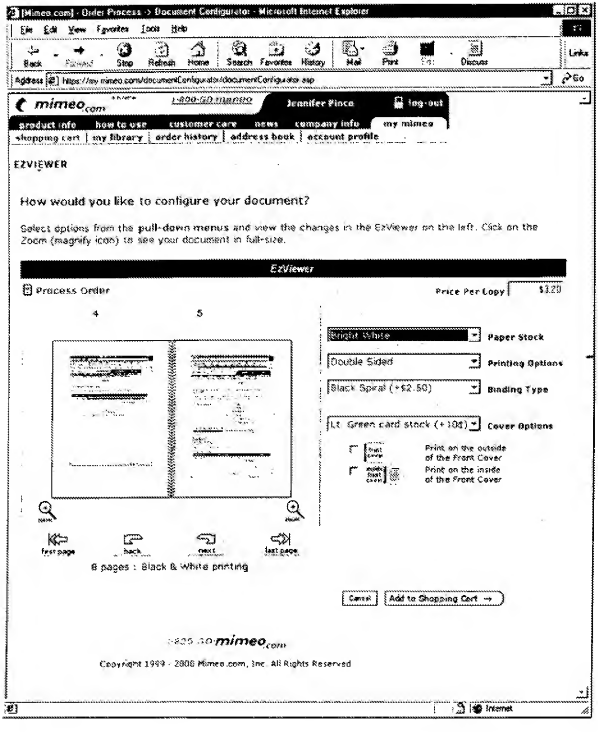


FIG. 17C

Ezviewer (Exact Print Configurator)
Paper options

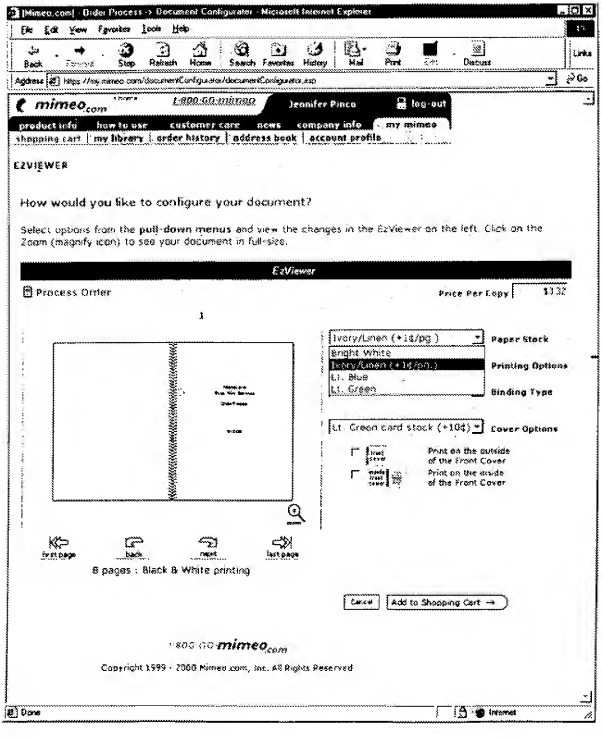


FIG. 17D

Ezviewer (Exact Print Configurator)
Printing options

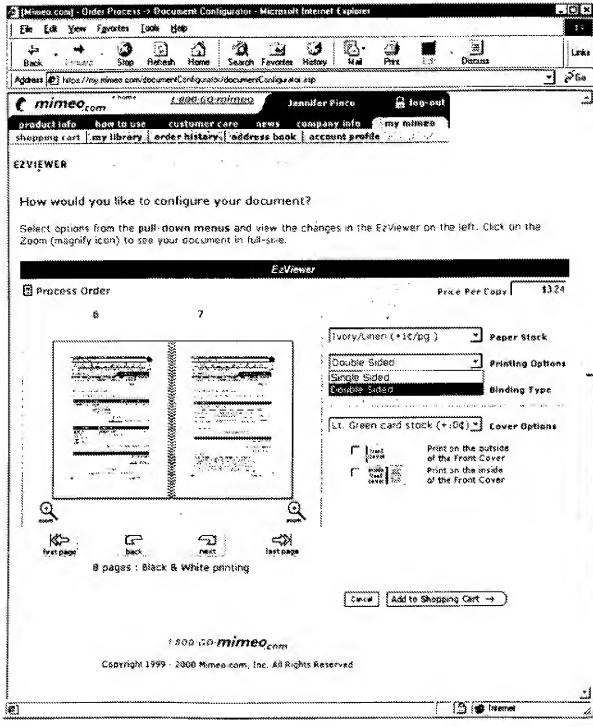


FIG. 17E

Ezviewer (Exact Print Configurator)
Binding Options

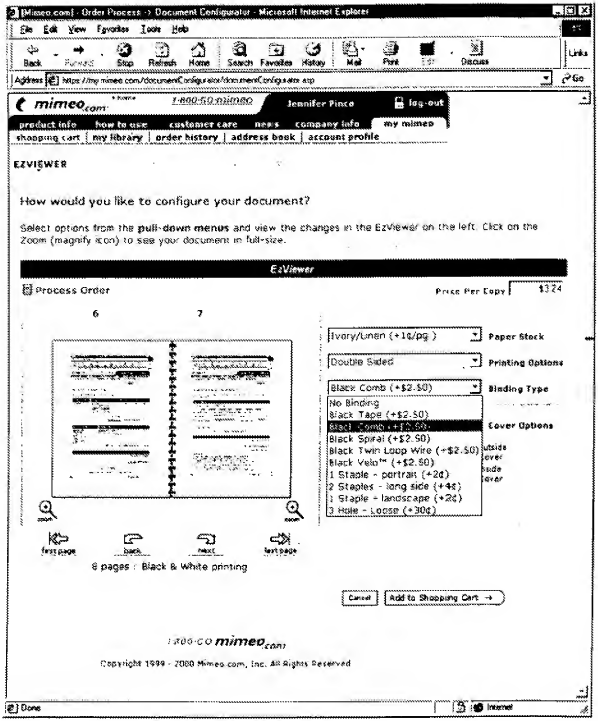


FIG. 17F

Ezviewer (Exact Print Configurator)
Cover options

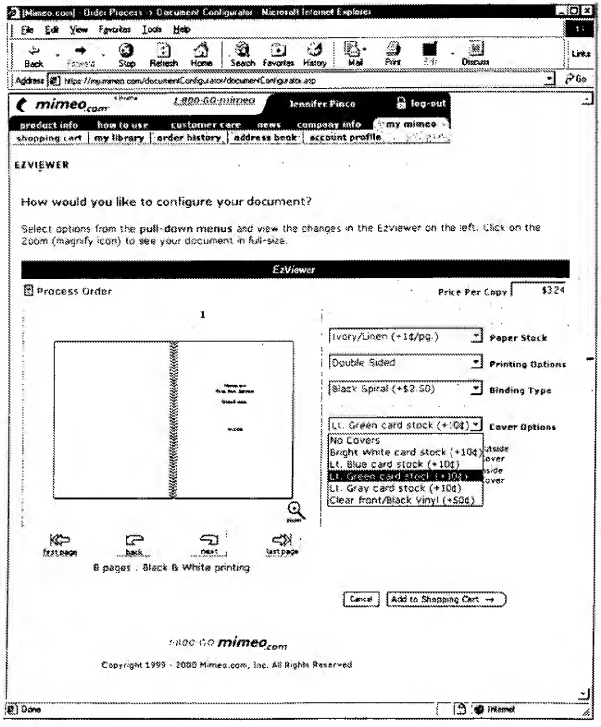


FIG. 17G

Ezviewer (Exact Print Configurator) Zoom

Zoom into any page and preview the 'printed' document in full size.

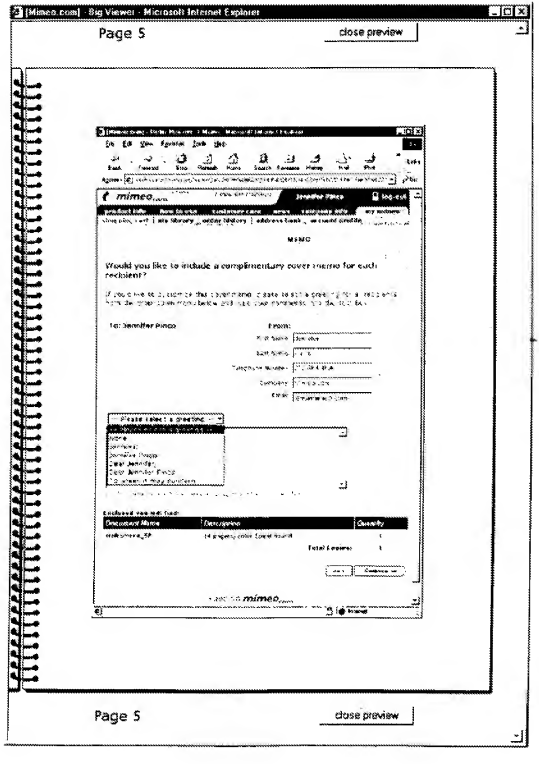


FIG. 17H

Shopping Cart

Add multiple documents to an order and input number of copies of each document

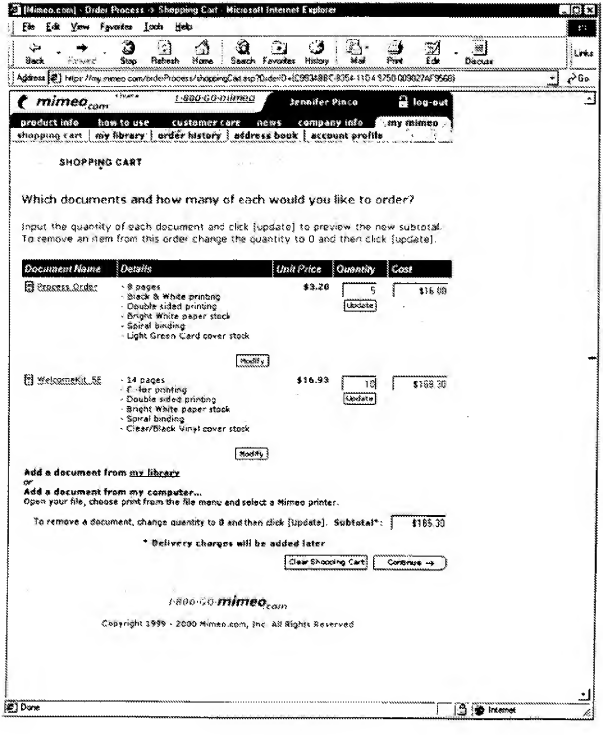


FIG. 17I

Addressing
Send documents to multiple recipients

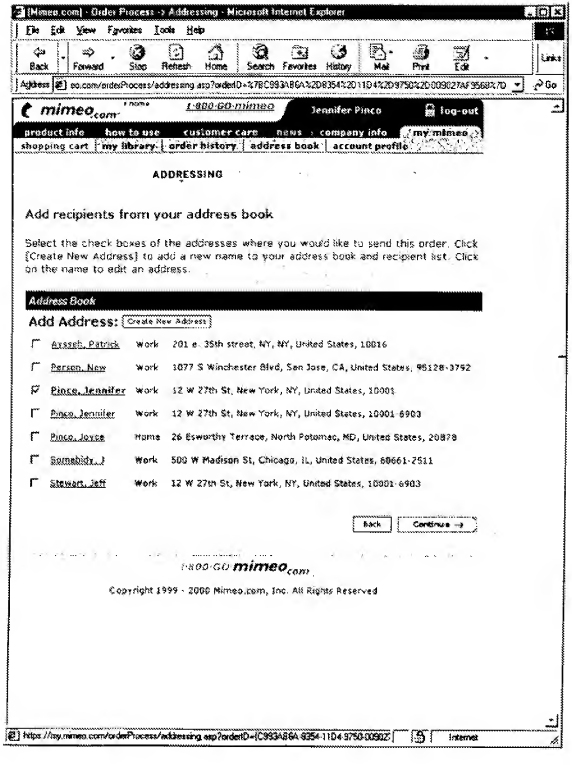


FIG. 17J

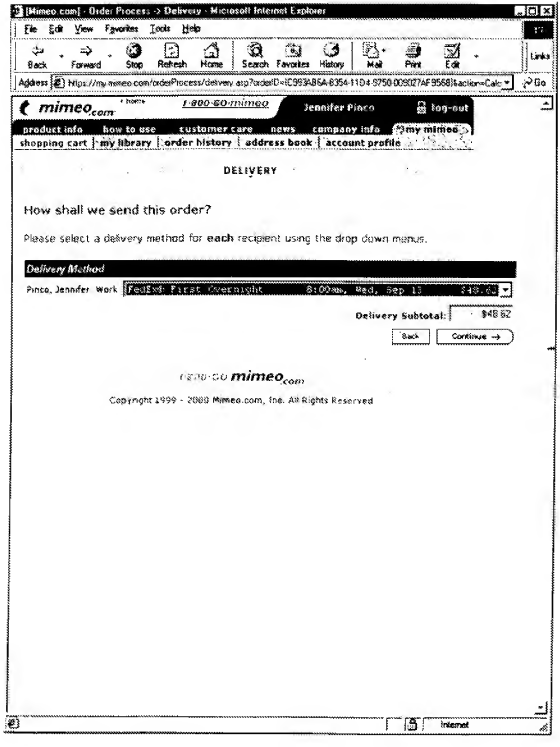

Delivery options
Delivery options for each recipient are shown by date, price and delivery method.
[Mimeo.com] - Order Process -> Delivery - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Refresh Home Search Favorites History Mail Print Edit
Address https://my.mimeo.com/orderProcess/delivery.asp?orderID=EC993AB6A-B954-11D4-9750-0050DA7AF956&action=Calc
mimeo.com
1-800-GO-mimeo
Jennifer Pinco
log-out
product info how to use customer care news company info my mimeo
shopping cart my library order history address book account profile
DELIVERY
How shall we send this order?
Please select a delivery method for each recipient using the drop down menus.
Delivery Method
Pinco, Jennifer Work FedEx: First Overnight 8:00am, Wed, Sep 13 $49.60
Delivery Subtotal: $48.82
Back
Continue →
1-800-GO mimeo.com
Copyright 1999 - 2000 Mimeo.com, Inc. All Rights Reserved
Internet

FIG. 17K

Memo

Users can create a customized memo for the package cover slip.

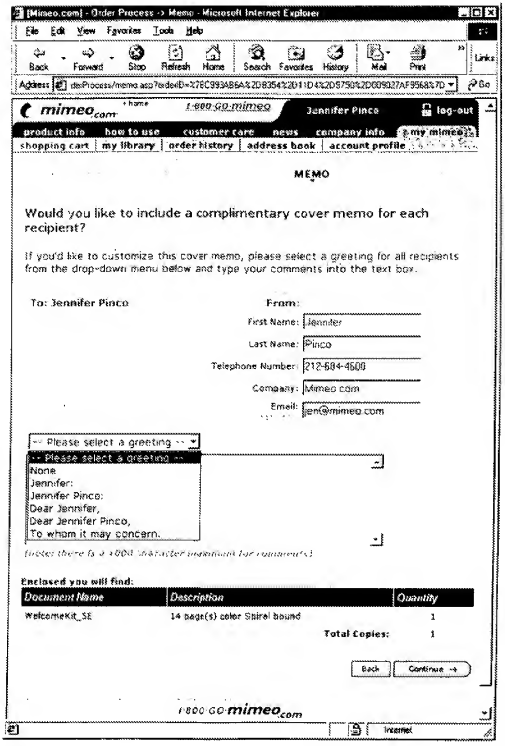


FIG. 17L

Summary

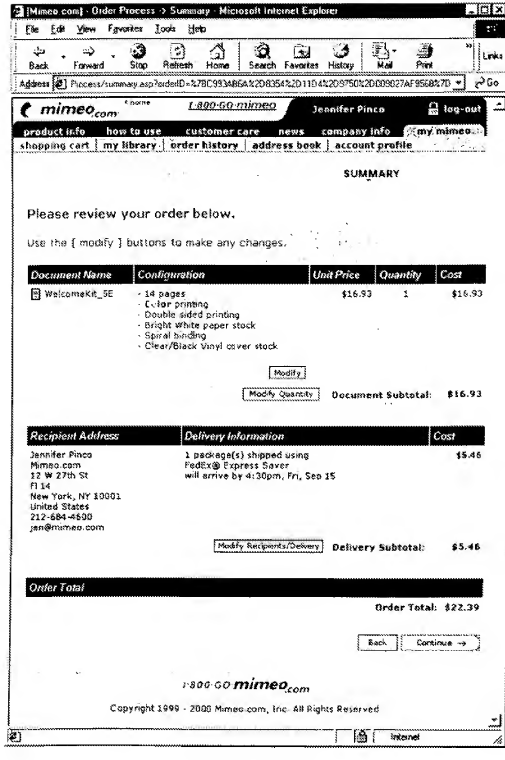


FIG. 17M

Payment

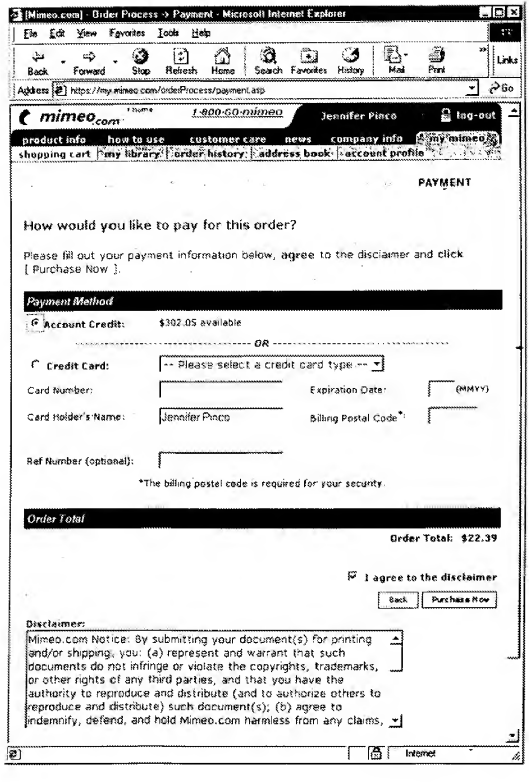


FIG. 17N

Order Confirmation

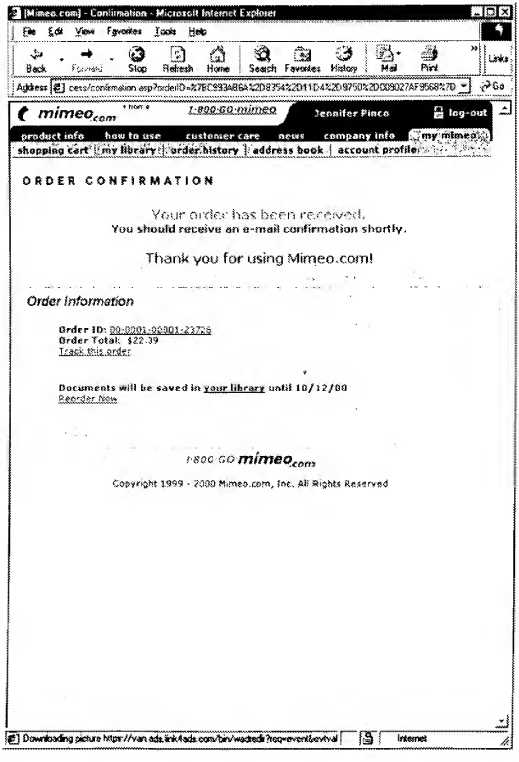


FIG. 17O

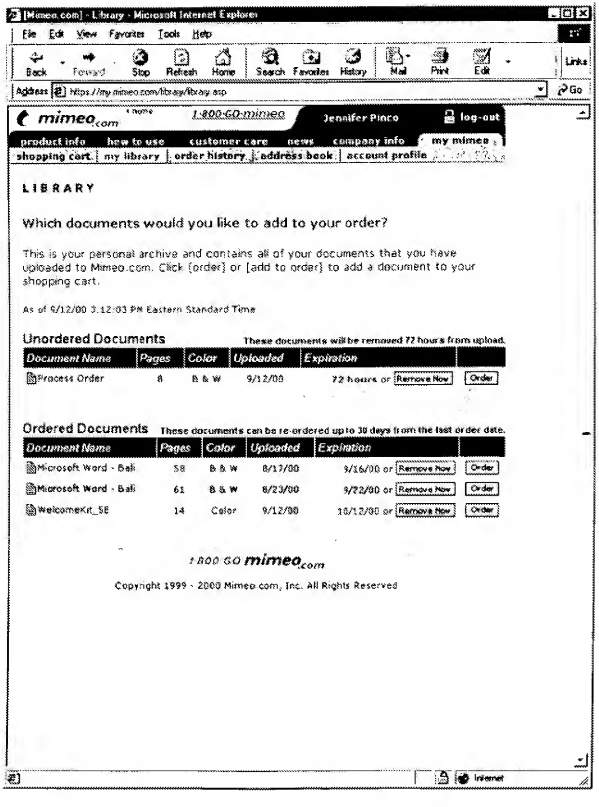

[Mimeo.com] - Library - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Links
Address https://my.mimeo.com/library/library.asp
Go
mimeo.com home
1-800-GO-mimeo
Jennifer Pinco
log-out
product info how to use customer care news company info my mimeo
shopping cart | my library | order history | address book | account profile
LIBRARY
Which documents would you like to add to your order?
This is your personal archive and contains all of your documents that you have uploaded to Mimeo.com. Click [order] or [add to order] to add a document to your shopping cart.
As of 9/12/00 3:12:03 PM Eastern Standard Time
Unordered Documents
These documents will be removed 72 hours from upload.
Document Name | Pages | Color | Uploaded | Expiration
Process Order | 8 | B & W | 9/12/00 | 72 hours or Remove Now | Order
Ordered Documents
These documents can be re-ordered up to 30 days from the last order date.
Document Name | Pages | Color | Uploaded | Expiration
Microsoft Word - Bali | 58 | B & W | 8/17/00 | 9/16/00 or Remove Now | Order
Microsoft Word - Bali | 61 | B & W | 8/23/00 | 9/22/00 or Remove Now | Order
WelcomeKit_SE | 14 | Color | 9/12/00 | 10/12/00 or Remove Now | Order
1 800 GO mimeo.com
Copyright 1999 - 2000 Mimeo.com, Inc. All Rights Reserved
Internet

FIG. 17P

Order History

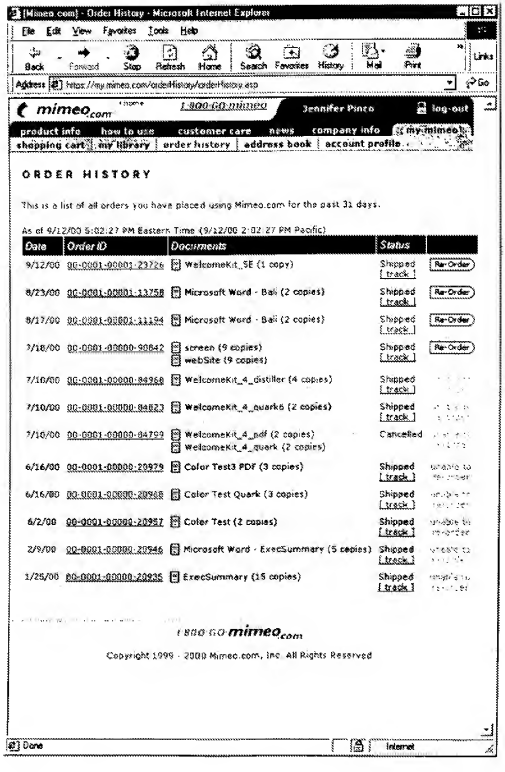


FIG. 17Q

Order Detail / Tracking

FIG. 17R

Account Profile

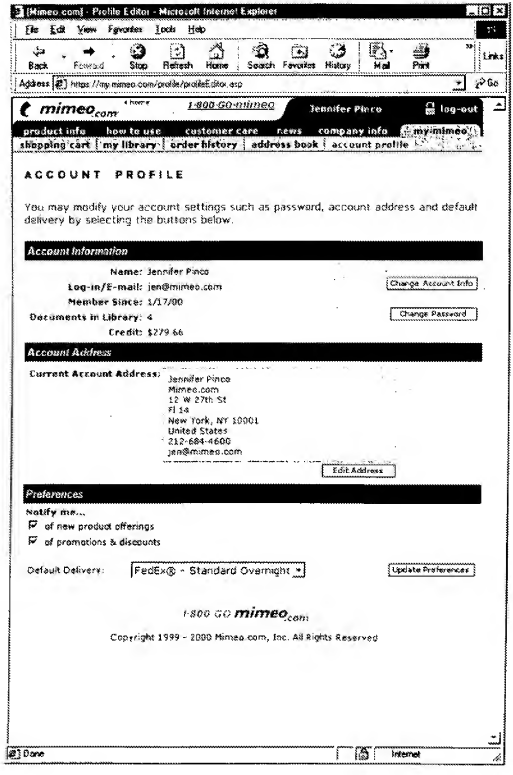
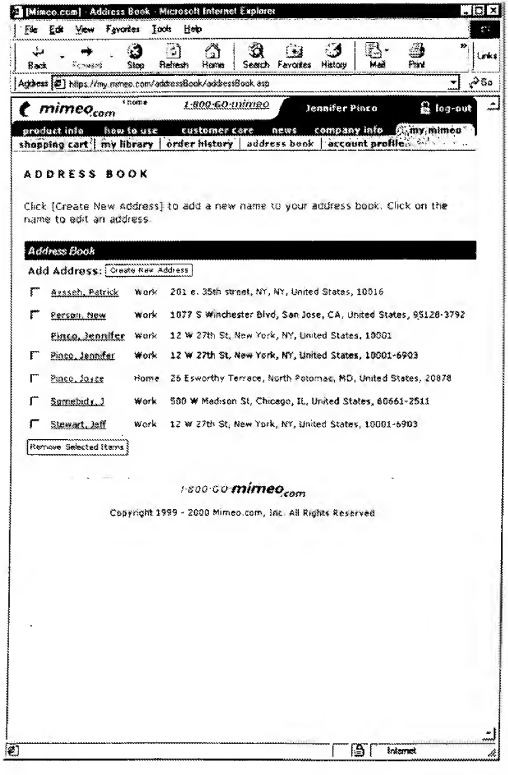


FIG. 17S

Address Book